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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,132	05/24/2001	Thomas Juestel	PHDE 000084	1103
24737	7590	02/02/2004	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			HARPER, HOLLY R	
			ART UNIT	PAPER NUMBER
			2879	

DATE MAILED: 02/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/864,132

Applicant(s)

JUESTEL ET AL.

Examiner

Holly R. Harper

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Amendment

The Amendment, filed on 11/17/03, has been entered and acknowledged by the Examiner.

Claim 1 has been amended.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, and 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steeger et al. (USPN 4,599,536) in view of Opitz et al. (USPN 5,744,233).

In regard to claim 1, the Steeger reference discloses a low-pressure (Column 2, Lines 57-59) mercury gas (Column 3, Lines 66-68) discharge lamp comprising an inner bulb (Figure 6, Element 5), which forms a gas discharge vessel and the wall of which is made of a material which is transparent to electromagnetic radiation and is coated with a phosphor (Column 3, Line 66 – Column 4, Line 5), and comprising an outer bulb surrounding and spaced apart from the inner bulb (Figure 3, Element 10), the wall of which contains a phosphor coating (Column 3,

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Line 66 – Column 4, Line 5), and comprising means for generating and maintaining a low-pressure mercury gas discharge (Column 6, Lines 58-64). The Steeger reference discloses that the phosphor coating converts UV light into light radiation, but does not specify the particular phosphor used in the lamp. The Opitz reference teaches coating a discharge lamp (Column 1, Lines 7-11) with coated phosphors comprised of ZnS:Cu,Au,Al; ZnS:Ag; or CaS:Eu (Column 3, Lines 29-33), which are UV-A phosphors. The coated phosphors are protected against chemical attack and are liquid and readily dispersible (Column 2, Lines 8-9). Thus, it would have been obvious at the time the invention was made to a person having ordinary skills in the art to incorporate the specified coated phosphors, as taught by Opitz, on the outer bulb to create a homogenous, dense and continuous layer.

In regard to claim 2, the Steeger in view of Opitz reference discloses that the wall of the outer bulb comprises a coating containing the UV-A phosphor.

In regard to claim 4, the Opitz reference discloses that a possible phosphor is ZnS:Ag (Column 3, Lines 29-33).

In regard to claim 5, the Opitz reference discloses that a possible phosphor is ZnS:Cu,Au,Al (Column 3, Lines 29-33).

In regard to claims 6 and 7, the Steeger reference discloses that the inner bulb is tubular, bent, and coiled (Figure 5, Element 5).

In regard to claims 8 and 9, the Steeger in view of Opitz reference discloses the claimed invention except for the limitation of the outer envelope being pear-shaped. It has been held that a change in shape is generally recognized as being within the level of ordinary skill in the art. It would have been obvious to one having ordinary skill in the art to shape the outer bulb into a

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pear-shape, since such a modification would have involve a mere change in the shape of a component.

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Steeger et al. (USPN 4,599,536) in view of Opitz et al. (USPN 5,744,233) in further view of Nishio et al. (USPN 6,437,502).

In regard to claim 3, the Steeger in view of Opitz references disclose a low- pressure mercury discharge lamp with phosphor coatings on the outer and inner bulbs. The outer bulb has a UV-A phosphor. These references do not disclose that the other bulb is made of resin. However, it is noted that the inclusion of a resin outer bulb is not shown to solve any problems or yield any unexpected results that are not within the scope of Steeger in view of Opitz's lamp. Accordingly, the inclusion of a resin outer bulb is considered to be an obvious matter of design choice. For example, the Nishio reference discloses that the outer envelope of a discharge lamp can be made from either glass or resin.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Anderson (USPN 4,508,993) discloses a low-pressure mercury lamp with a similar structure and a phosphor coating on the inner and outer bulb.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Holly Harper whose telephone number is (703) 305-7908. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (703) 305-4794. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Holly Harper
Patent Examiner
Art Unit 2879

Joseph Williams
Joseph Williams